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Land and ‘Space’ for Regulating Artisanal Mining in Cambodia: Visualizing an Environmental Governance Conundrum in Contested Territory

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ABSTRACT

Globally, land use competition in mining areas is coming under increased scrutiny, leading to critical debates about inter-related physical and political “spaces” for environmental governance. By signing a global treaty called the Minamata Convention on Mercury, governments worldwide have conveyed a commitment to formalizing or regulating informal artisanal gold mining as part of an environmental governance strategy. Drawing on a case study of disputed gold mining territory in Kratie Province, Cambodia, this article examines how commitment to the Minamata Convention presents a conundrum given the government’s prioritization of larger-scale concessions in land use policy. In most mineral-rich regions of Kratie and other provinces, mineral exploration and/or mining rights - and other kinds of resource concessions - have already been granted to established companies and powerful actors, leaving ambiguous *physical* and *political* space for licensing artisanal mining. The article explores contested representations of mining as found in provincial government maps and civil society groups’ cartoon illustrations, unpacking how competing mandates in the mining sector have created dilemmas for regional environmental governance as complex land-use conflicts between artisanal miners and larger companies have unfolded. Diverse competing claims to resources in Kratie illustrate the need to move beyond framings of the Minamata Convention as a technical implementation challenge in order to carefully appreciate the power dynamics inherent in divergent ways of visualizing “productive space” in mining regions. Contributing to recent scholarship in this journal on contested land use governance in Cambodia, the article calls for unpacking complexities of formally “making space” for artisanal mining in contested territory. At a wider conceptual level, the analysis highlights the importance of sensitively challenging common de-territorialized depictions of land use formalization that oversimplify the dialectical and contextually idiosyncratic interplays between political and physical space.

Key words: Cambodia; land use policy; space; land use formalization; environmental governance; small-scale mining; extractive sector; visual representations

Introduction

The expansion of the mining sector globally is the subject of growing debate, with considerable attention devoted to power dynamics in governing and contesting large-scale mining in Asia (Bedi, 2013; Holden et al., 2011; Hatcher, 2013; Hatcher, 2015; Oskarsson, 2013). However, little literature in Asia has focused on power dynamics in regulating and representing artisanal and small-scale mining (ASM), a segment of the mineral economy that presents complex and often very different – yet related – socioeconomic and environmental challenges (Lahiri-Dutt et al., 2014; Verbrugge and Besmanos, 2016). In examining mining in West Africa, Maconachie (2014) raised questions about how *spaces of participation* and *spatial metaphors* are understood in the extractive sector, profiling the importance of research on artisanal mining that uses spatial lenses to interrogate extractive sector development agendas. Maconachie interrogates “spaces of community-led development ‘from below’ and corporate controlled spaces of development ‘from above’” (p. 275). The present article uses a spatial lens – exploring the usefulness of spatial metaphors and visual representations of land use – to examine debates over artisanal gold mining governance in Cambodia, a country where there has hitherto been very little research examining mining and associated land use tensions. The article focuses on social contexts and interpretations surrounding a map of disputed resource rights, rethinking contested physical and political space in relation to mining sector land use in Kratie Province, a region discussed by Neef et al. (2013) as an example where policymakers have favoured large-scale land concessions that have “created new types of rural poverty and landlessness” (p. 1101). I argue that rethinking this map provides a useful prism through which to understand how Cambodia’s mining sector is caught between competing visions for the future of mining sector land use, with different “spatial logics” at work.

Dwyer’s (2015) recent analysis of land titling and politics in Cambodia leads him to question “the formalization fix as a policy solution” and how maps are used - by government agencies, donors and others - in situations where there is little “spatial transparency.” “Formalization” of resource use, he argues, can be a mechanism for privileging large companies and a “technology for writing smallholders out of the legal picture” instead of a tool to empower rural populations. The “formalization fix” needs rigorous analytical treatment in the mining sector too, recognizing complex links between market forces and land use policy mandates in contested territory. Past scholarship stresses that mining laws and environmental regulations in Asia have been ineffective and inequitable for numerous reasons, including

the fact that ASM activities¹ are generally not licensed (Shen et al., 2009; Burke, 2006). While environmental scholarship has long stressed that poor ASM practices lead to land degradation and pollution, posing various health risks, a growing body of literature questions the mainstream portrayal of this sector in terms of its threats and “illegality,” noting that ASM provides crucial informal livelihoods to large numbers of people worldwide (Canavesio, 2014; Lahiri-Dutt, 2012; Hirons, 2011; Jönsson et al., 2013; Bryceson et al., 2013; Fisher and Childs, 2013; Spiegel, 2015). The first of the two main “spatial logics” analysed in this article lies in the government’s mandate to regulate ASM – which ostensibly became a priority when, in October 2013, Cambodia signed a historic global environmental treaty called the Minamata Convention on Mercury. The Minamata Convention signaled that policymakers were not only committed to managing mercury use in the ASM sector, one of the world’s largest sources of mercury pollution, but also agreed to develop new “*steps to facilitate the formalization or regulation of the artisanal and small-scale gold mining sector*” (Paragraph 1C, Annex to Article 7) (UNEP, 2013a). Currently, although Cambodia’s mining laws include provisions to legalize artisanal mining in theory, almost all ASM activity is not licensed (CRRT, 2013; Chapman, 2013; Phnom Penh Post, 2015a).

However, whereas the Minamata Conventions’ “formalization” mandate calls for licensing of ASM, building capacity and promoting cleaner technology in artisanal mining communities (presenting an ASM-oriented vision for formalizing land use), it stands at odds with a second spatial governance strategy – the current prioritization of larger-scale companies’ concessions. In most mineral-rich regions of Cambodia, mining and/or mineral exploration rights have already been granted to established foreign or local companies (in some cases overlapping with other companies’ land concessions), raising questions about whether there are practical possibilities for licensing ASM. Over the past decade, an unprecedented number of mineral exploration licenses have been issued, and non-governmental organizations (NGOs) have been vocal in critically questioning and challenging, for example, how powerful and well-established companies² were holding 128 mineral exploration concessions covering 24,000 square kilometers of Cambodia’s most mineral-rich land (CRRT, 2013). Land use conflicts have created difficulties for environmental planning, and conflicts between artisanal miners and security

¹ While heterogeneous, ASM activities are generally defined in terms of their reliance on rudimentary mineral extraction technologies.

² These include companies based out of Australia, South Korea, Vietnam, China, Singapore and Thailand, for example, in addition to companies based in Cambodia.

forces of both large companies and state authorities have led to intensified public concern about the need for mining reforms (CRRT, 2013; Keating, 2012).

By unpacking the question “*Is there space for regulating artisanal mining in Cambodia?*” this article contributes to a growing body of scholarship on land conflicts and land grabbing in Cambodia, which has warned of the problems of eviction and forced relocation of marginalized rural communities (Milne, 2013; Dwyer, 2015; Rudi et al., 2014; Scheidel et al., 2013). Particular focus has been on whether there is physical land space as well as political space for recognizing the rights of local and migrant Cambodian land users in the face of neoliberal policies that prioritize large-scale companies and that benefit a small segment of the population (Baird, 2013; Baird, 2014a; Loehr, 2012a; Loehr, 2012b; Rudi et al., 2014; Scheidel et al., 2013; Scheidel et al., 2014). This study engages similar concerns in the mining sector, appreciating how dialectical relations between physical (material) space and political (symbolic) space are, as David Harvey (2004; 2006) famously theorized, profoundly impacted by neoliberal policy biases, often with substantial environmental implications. Drawing on Harvey’s insights, Springer (2009; 2013) discussed the neoliberalisation of “space” in Cambodia and evictions of the poor in contested land, showing how physical and political spaces have been shaped by elite actors’ discourses of “order” and “stability.” Neef et al. (2013) discussed how environmental narratives have been politically instrumentalized in practices of land control in Cambodia, documenting cases where the language of “degraded” land and “non-use” of land has been used by state authorities to justify removing local people from lands to make space for large companies’ land concessions. A critical understanding of the Minamata Convention calls for a close examination of the extent to which there is “space” - physical and political - for artisanal mining, recognizing that paradigms for governing mining are contentiously visualized.

The section below provides background on Cambodia’s artisanal mining sector, including factors that contributed to Cambodia signing the Minamata Convention. The next section outlines the conceptual approach and research methods, setting out how a spatial lens for analyzing government maps and civil society documents, contextualized through interviews and participant observation, is used to rethink assumptions in mainstream environmental governance discourses. The following section discusses contested *regulatory space* at national and regional levels, examining tensions between artisanal miners and large companies to critically contextualize “formalization” challenges. It interrogates *physical space*, examining a map of mining rights in Kratie Province, along with competing

formal and informal land claims in the area, as the point of departure for challenging technocratic notions of extractive sector regulatory space. The article then considers how the Minamata Convention can be interpreted as adding a new impetus – in theory - for environmental risk management and livelihood support in mining areas. Considering *competing visions of productive space*, this section argues that current neoliberal modes of prioritizing large-scale concessions in Cambodia’s development strategy, unless radically modified, threaten to undermine not only livelihoods of artisanal miners but also the environmental governance goals associated with the Minamata Convention. It underscores a need to conceptualize environmental governance in relation to contested visions of productive land use in gold-rich areas, rethinking ways of “making space” for less affluent constituents in the mining sector. This article stresses that a spatial lens applied to Cambodia’s mining context provides vital opportunities for challenging de-contextualized and de-territorialized policy discourses of land use formalization, calling for greater attention to differently situated ideas about visualizing space in mining areas.

Background: Contextualizing Socio-Spatial Complexities of Artisanal Mining in Cambodia

Over the past decades, several countries in Asia prioritized the expansion of mining industries in land use planning. However, years of conflict and political instability in Cambodia until the late 1990s hampered the development of its mining sector strategies, despite having substantial mineral wealth (Browne et al., 2011). Sotham (2004) reviewed historical trajectories of gold mining in four sites that highlight a range of challenges in Cambodia. For example, addressing the case of Phnom Chi gold mining site in Kampong Thom Province, the study noted that civil war during the 1970’s stopped artisanal and small-scale gold mining activity and reviewed dynamic patterns of militarized involvement in the 1980s and 1990s, addressing how access to gold mining areas was taxed and/or controlled by Khmer Rouge soldiers and later military soldiers from the Royal Army following the establishment of the Royal Government in 1993. Some people risked their lives to mine in the 1980s and, in some cases, gold mining increased in the 1990s. In the early 1990s state authorities in Cambodia imposed moratoriums on the extraction and export of minerals and timber due to concerns that these resources were being used to benefit insurgents and undermine state governance (Le Billon and Springer, 2007). Since then, NGO reports have often noted that ASM is an important livelihood activity for rural populations who depend on ASM as a source of income, highlighting important economic roles of both artisanal gold and gemstone mining; NGO reports have also noted that these activities frequently take

place in disputed areas where companies have - in the 2000s - been awarded mineral exploration licenses (CCC, 2010; CRRT, 2013).

The ASM sector involves socially diverse groups of workers who employ various methods to mine gold, by panning for alluvial gold using basic tools or by hard rock (primary ore) mining with more sophisticated technologies. In many cases, gold miners use explosives and chemicals including cyanide and mercury; the nature of this activity varies substantially from region to region. In some contexts ASM is a temporary seasonal activity, whereas in other contexts it is a primary occupation and traditional activity that families have conducted for generations, as in Preah Vihear, Rovieng District (IPNN, 2010; Keating, 2013). In Kratie Province, reports note that rice farming challenges have contributed to dependence on ASM (Cambodia Daily, 2011). In part, socioeconomic dimensions of Cambodia's ASM sector have changed as both agricultural challenges and land tenure insecurities have driven people into subsistence gold mining as a poverty alleviation strategy (CCC, 2010; Spiegel and Hoeung, 2011).

The land licensing approach adopted by the government, as discussed by Scheidel et al. (2013), has been characterized by a rapid acceleration in the number of Economic Land Concessions (ELCs) to large companies, producing deep frictions between smallholder producers and large-scale agribusinesses. ELCs are long-term leases that allow the holder of the concession to clear land for industrial development; the 2001 Land Law formalized the legal framework for granting ELCs for projects in forestry, rubber, oil palm, sugar cane and other crops. Estimates indicate that companies' ELCs cover as much as – or even more than – 2 million ha of land, with foreign-based companies in many cases holding the concession rights (Scheidel et al., 2013; Neef et al., 2013; Milne, 2015). Insecure resource tenure and growing land use conflict in many rural areas have played key roles in forcing dependency on informal livelihoods, with national development policy reforms privileging elite actors' claims on resources (Grimsditch and Renfrey, 2012; Grimsditch and Henderson, 2009). While these factors fueled unlicensed gold mining activity in certain parts of the country, the high price of gold was a further factor in the 2000s. Writing in the early period of this gold rush prior to a significant increase in the global gold price in 2005, Sotham (2004) noted that gold miners in Cambodia could be generally categorized into four groups: poor migrant workers; local artisanal miners; wealthy migrant miners; and concessionaires. He indicated that, generally, local people and unskilled migrant workers earned US\$ 1.5 to US\$ 2.5 per day, while skilled workers and supervisors earned more; wealthy miners

who owned machinery or excavations could earn around US\$ 10 to US\$ 15 per day. Sotham (2004) noted that the number of independent miners decreased in early 2000s due to increasing control over mining areas by concessionaires and wealthy miners.

Much like Verbrugge (2014) argued when discussing ASM in the Philippines, Cambodia's ASM sector has not just been "poverty-driven"; indeed, focusing too narrowly on poverty as the "push factor" that fuels ASM risks obscuring the socially and economically diverse nature of the sector. Nonetheless, poverty-driven ASM plays an important role in Cambodia's mining sector, with diverse actors and economic interests involved. In 2011, a report by Cambodia's Ministry of Environment noted that "artisanal and small scale gold mining has become an increasingly important profession in Cambodia from year to year, both for full-time professional migrant gold miners who move from one gold deposit to another, and for local farmers who supplement their income between agricultural seasons" (Ministry of Environment, 2011, p. 6). It explained that ASM activities occur in several provinces (especially in the north-east and north-west parts of the country) including Ratanakiri, Mondulakiri, Stung Treng, Kratie, Phrea Vihear, and Oddor Meanchey provinces (among other provinces) with an increasing number of known gold deposits attracting interest from companies and ASM groups alike. The exact number of miners in the country is unknown, although the Ministry of Environment's assessment in 2011 noted awareness of some 6,000 artisanal and small-scale miners. It also recognized that mining settlements in some cases may include more than 1,000 artisanal miners, including men, women and children involved in gold extraction (Ministry of Environment, 2011). The *Jakarta Post* described "tens of thousands" of artisanal miners in Cambodia, underlying the uncertainty in estimating the number of people involved in this sector (Jakarta Post, 2011). The *Phnom Penh Post* also published several news stories in 2015 that highlight the increasing police and military clampdowns in (and involvement in) the sector, with headlines such as "Military police to join in mining crackdown" (Phnom Penh Post, 2015b) and "Gov't prepares for mine standoff" (Phnom Penh Post, 2015c), accentuating the ongoing concerns about "illegal" mining zones as spaces of conflict.

Although recent scholarship has noted the significant size of large-scale mining companies' vast concessions in Cambodia in the context of rural land grabs (Milne, 2015; Jiao et al., 2015), there has been remarkably little scholarly research focusing on social dimensions of mining in Cambodia, with only few exceptions (Chapman, 2013; Spiegel, 2014a). Within ASM sites, labour dynamics can vary considerably but typically involve digging, excavating, transporting, grinding and crushing of ore,

amalgamation work to extract gold particles (in some cases, with the use of considerable mercury), and other activities that are, in some cases, shared amongst groups of miners. Labour structures vary according to different kinds of equipment, with mining activities often concentrated around ore processing centres where equipment owners allow miners to process ore for a fee, which can be a substantial proportion of revenues generated from the gold yield (Spiegel and Hoeung, 2011). Equipment owners also often provide mercury to miners for use in amalgamation, mercury being widely used in ASM because it is the simplest and most inexpensive method to extract gold (Davies, 2014). Cambodia's trend in the past ten years has been towards increased levels of technological mechanization with increased chemical use in gold mining in various regions (Murphy et al., 2013; Grimsditch and Renfrey, 2012). The Ministry of Environment assessed environmental and health risks of mercury use in mining communities in Kratie and Ratanakiri (Vibol, 2008), and mercury exposure from the misuse of mercury in the gold amalgamation process was shown to be a significant problem for health in sites examined by Murphy et al. (2008; 2013), whose research demonstrated that, depending on where the tailings are discarded, surface water and groundwater pollution can pose significant additional environmental health concerns. As these various risks have led to increased public calls for regulation, the next section outlines the study's approach for unpacking spatial dimensions of regulation for ASM, considering tensions between large and small-scale mining and the relevance of critically re-visualizing physical and political "space" for regulating ASM.

Conceptual Approach and Methods

The approach used in the article responds to David Harvey's call for rethinking multiple interrelated notions of space, including "spaces of representation" as key components in critiques of the "space of private property relationships" (Harvey, 2004, p. 3). This study's conceptual lens for analyzing the "formalization" clause in the Minamata Convention thus gives particular attention to unpacking divergent ways of visualizing "productive space" in Cambodia's mining sector. This includes examining government maps depicting mining rights in an area in Kratie Province where large mining concessions cover a large part of the land mass (what Harvey would call *absolute space* in the form of *grids*) as well as Cambodian advocacy groups' drawings that present a visual counter-narrative – by depicting the land use of large mining companies as compared to families engaged in artisanal mining – an example of contested representational space. This approach also builds on debates about strategies

for spatial analysis of extractive sector land use, including recent calls by Bebbington et al (2014) and Cuba et al (2014) for greater attention to strategies for sensitively *visualizing* competing claims on resources when contemplating social complexities of mining sector governance. Specifically, while discussing maps, Bebbington et al. (2014) argue that “there is much to be gained from making explicit the spatiality of the relationships between the expansion of extractive industry and pre-existing forms of land use and land governance” and they stress that “these gains are at once analytical, communicative and political” (p. 56). With this insight in mind, this study examines a case study in Sambo District, in Kratie Province, to interrogate visual depictions of resource rights in an area where large mining concessions cover a large part of the land mass, and where a community has worked in artisanal gold mining since the early 1990s.

To appreciate how conflicts over space are shaping environmental planning challenges that could affect implementation of the Minamata Convention, the approach unpacks two kinds of visualization: on one hand, maps of mining rights and land concessions in Kratie provided by provincial authorities from the Ministry of Industry, Mines and Energy (MIME); and, on the other, cartoons depicting land use of large-scale mining companies and artisanal miners’ mining rights, as provided by Cambodian NGOs, specifically Bridges Across Borders and Development and Partnership in Action (DPA). The analysis draws from the author’s research between 2010 and 2015, involving interviews, participation observation as well as analysis of secondary sources including government documents and reports by NGOs. Interviews were held with 13 national and provincial government officials in mining, environmental and finance ministries, including 8 MIME officials; as well as 10 representatives of Cambodian-based NGOs and internationally based NGOs. The analysis also draws on the author’s interviews in an ASM site in Sambo District situated in a mineral exploration concession held by a Chinese company, Xing Yuan Kang Yeak Ltd, measuring 28-square kilometers - an area with multiple overlapping land claims. Interviews were conducted on-site with 3 representatives of the Chinese company that held the mineral exploration license for the region - comprising a security guard, a resident company geologist and a company on-site manager - and with 4 artisanal miners who lived and worked within 400 metres of the company’s buildings. This article is part of a larger study, which included a comparative analysis of the impact of globalization on mining in Ratanakiri Province and Kratie Province (Spiegel, 2014a).

Considerable difficulties exist in terms of “access” to interviewees in rural resource concessions; even senior government officials in national and regional offices have publicly decried the tremendous difficulties in being “allowed” to access gold mining sites in various regions of Cambodia, as many gold mining zones are tightly policed by company security guards.³ The author’s unique access to the mining site in a Chinese company’s concession – which officially went from being a mineral exploration concession to a mining concession in 2011 – was facilitated by government officials from MIME as the fieldwork was partially sponsored by the United Nations Development Programme (UNDP) in an initiative to inform national policies on gold mining. Recent geographical scholarship has reinforced the need for critical reflection during and after commissioned studies, emphasizing the ethical imperative and usefulness of unpacking work conducted with policymakers (Baird, 2014b), while engaging diverse perspectives. UNDP presented briefings from the preliminary phase of the study in both English and Khmer with the assistance of a Cambodian intern, to facilitate public dialogue on early findings with Cambodian stakeholders. As UNDP gave the author permission to use the research for academic publications to inform the international scholarly community, this study represents an opportunity to analytically reflect on some of the mining sector land use policy issues that are often under theorized.

The initial fieldwork in 2010 was followed up for the current analysis with interviews in 2013, 2014 and 2015 of officials from international agencies tasked with advising on the implementation of the Minamata Convention on Mercury. Interviews in 2015 with advisors to UNEP on the implementation of the Minamata Convention provided insight into global perceptions of national policy and contested space in Cambodia’s ASM sector. These interviews were complemented by participant observer research at international inter-governmental negotiation sessions during the lead-up to the Minamata Convention in 2013 and the author’s participant observation in mining sector discussions in Phnom Penh, including at a conference where the Prime Minister of Cambodia, Hun Sen, addressed mining sector stakeholders from across Cambodia. The study also draws on media representations of Cambodia’s gold mining sector, focusing on recent stories printed in *The Phnom Penh Post* (2015a-g).

Regulatory Space and Tensions in Managing Artisanal Gold Mining

³ Various Cambodian government officials including a MIME official, a police commissioner and a Vice-Governor have spoken publicly about being prevented from visiting certain mining company concessions (Equity Weekly, 2009).

Unpacking National Regulatory Space for ASM

Regulatory “space” for mining is shaped by Cambodia’s 2001 Mining Law, which includes 6 kinds of licenses - for artisanal mining; pits and quarry mining; gemstone exploitation; mineral cutting; mineral exploration; and industrial mining (Article 11). The artisanal mining license ostensibly facilitates bringing some ASM activity into a regulated framework, stipulating that the artisanal license “*may be issued only to persons of Khmer nationality for the purpose of conducting the exploration and exploitation of mineral resources by using locally available common instruments and their own labor or with the help of family with no more than 7 (seven) persons*” (Article 11). However, no artisanal mining licenses had been issued until 2015, when Cambodia’s first license for community mining was granted in Monduliri Province, in what has been branded a “landmark government initiative” (Phnom Penh Post, 2015d). One national MIME official in 2010 had thought that three licenses might have been issued in the past, though this was not confirmed, and he explained that this legal clause has not functioned as an *active* governance tool.⁴ One explanation for this is that, until 2015, there have been no policy directives or government funding allocated for mining education programs in rural ASM areas that could facilitate licensing and regulating of artisanal miners.

Another explanation relates to the long distance it takes to travel to Phnom Penh for the licensing process (leading to reforms in 2015⁵); and a further explanation is that the narrow legal definition limits the acceptable technologies and practices to such a degree that the law has become incompatible with present-day rural realities. In addition to legal restrictions which stipulate that only “*locally available common instruments*” are permissible, the above license are limited to “*explore and exploit mineral resources found only in loose state in silts, gravel, sand and rock, and within a demarcated area no larger than 1 (one) hectare, and to a maximum depth of 5 (five) meters*” (Mining Law, Article 11). There is ongoing debate on whether regulatory space should be widened to include legalizing *semi-mechanized* forms of *small-scale* mining in light of increasing levels of mechanization along with deeper digging.⁶

⁴ Interview with national MIME officer, Phnom Penh, May 2010.

⁵ Prior to government reforms introduced in 2015 (Phnom Penh Post, 2015e), all mining licenses were processed in Phnom Penh, rendering provincial authorities limited in their powers (Interview with provincial MIME officer, Kratie, May 2010).

⁶ To contextualize the restrictive definition in Cambodia’s law, it is noteworthy that in Indonesia, “community mining” – i.e. ASM in Indonesia’s legal context – permits digging up to 25 metres of depth (Spiegel, 2012). Notably, Cambodia’s Ministry of Environment released a report in 2011 noting that some ASM activities in Cambodia go “up to 80 meters deep” (Ministry of Environment, 2011, p. 6).

A further - fundamental - factor that contributes to the “illegality” of (or rather, failure to regulate) ASM is widespread land use competition between large mining companies and ASM groups. A report released by the United Nations Human Rights Council (UNHRC) in 2012 hinted at these problems, warning that approximately two million hectares of land have already been granted to mining companies for mineral exploration (UNHRC, 2012), underscoring the growing concern about the impacts of land privatization on local rights. Despite existing national mining policies in Cambodia that stipulate that portions of large mining concessions should be “relinquished” every 2 years if not used, these have not been enforced in practice, thus providing no incentives for large companies to actually relinquish unused portions of their concessions - including portions deemed uneconomical for large-scale mining but potentially suitable for small-scale activity.⁷

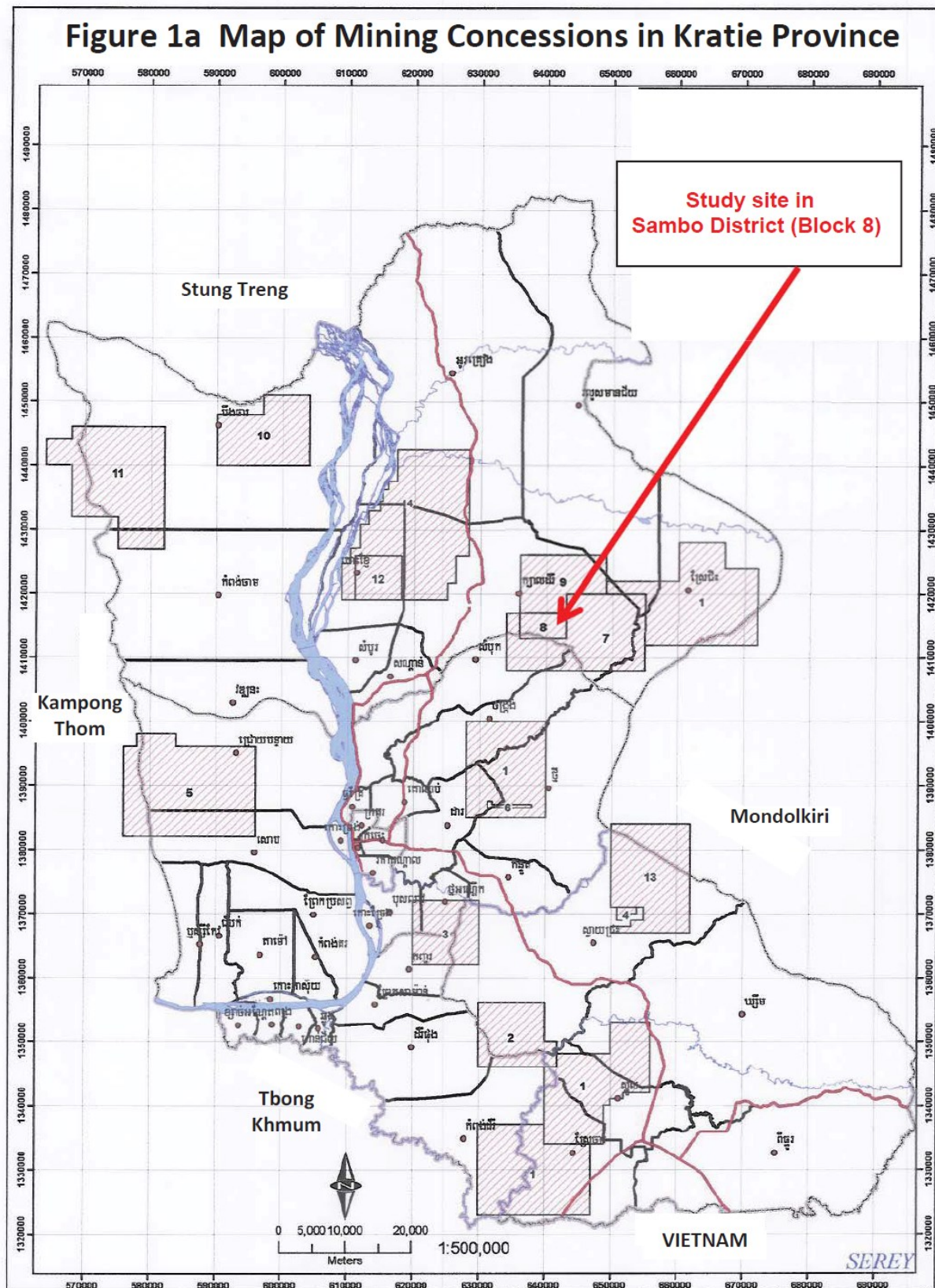
Legalizing and regulating ASM operations could be a way of making ASM safer as well as more environmentally sound while improving technology and livelihood security and minimizing conflict. In some countries, large-scale mining companies have reportedly co-existed in mutually beneficial ways alongside ASM in the same rural areas; the International Council on Mining and Metals (ICMM) stresses that this spatial co-existence – this “working together” – should be encouraged in many cases and can even be beneficial for companies by helping to avert conflict (ICMM, 2009). However, in contrast to the ICMM portrayal of a “win-win” co-existence, land use in Cambodian ASM contexts has been shaped considerably by conflict between artisanal miners and large-scale companies - Chinese, Australian, Vietnamese, Korean, Cambodian and others - that move in between exploration and mining development stages. In this regard, it can be argued convincingly that Cambodia’s ASM sector resonates much more with the description presented by Luning (2014) in her analysis of corporate perspectives of artisanal miners in Burkina Faso, where artisanal miners have repeatedly been characterized as “valued pathfinders” and then - afterwards - “disposable illegals.” Different companies have different patterns when it comes to working with ASM groups, benefiting from their “path-finding” and/or policing such groups in resource-rich areas during exploration stages.

⁷ According to mining authorities, national policies stipulate that companies should “*Relinquish a part of concession areas where minerals are not found under valid exploration licenses. The relinquishment shall be made in every 2 years during the exploration period at least thirty (30) percent of the initial area. Each area relinquished shall be not less than ten (10) percent of the initial area and shall be composed of contiguous blocks in conformity with the geometric requirements*” (GDMR, 2013).

Is there “Space” for Artisanal Gold Mining in Kratie? - Contextualizing a Map in Contested Terrain

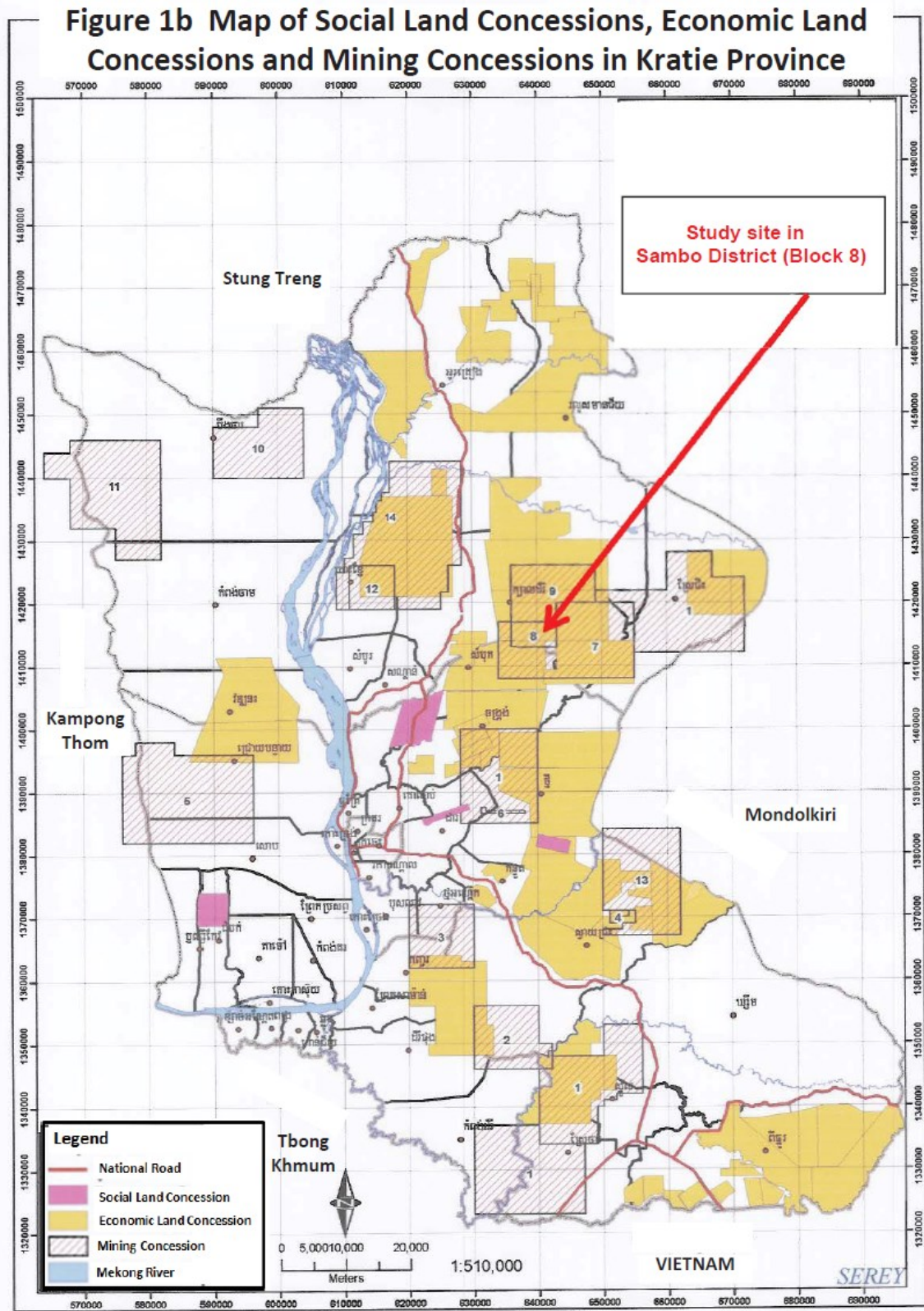
Although Neef et al. (2013) provide an in-depth account of land use conflicts in other sectors in relation to land concessions in Kratie, where most large-scale Economic Land Concessions have been leased by foreign investors, conflicts around mineral extraction in Kratie have been under-studied to date. Kratie is spatially dominated by mining concessions, with 14 companies licensed for mineral exploration. Figure 1a is a map showing mining licenses in Kratie, illustrating the large proportion of space allocated to mining concessions. Figure 1b shows the overlap between mining licenses and land concessions in Kratie, illustrating extensive “shared” land space in some regions.; Xing Yuan Kang Yeak’s concession, the site of the fieldwork, is located in “block 8” on Figures 1a and 1b.

Figure 1a: Map of Mining Concessions in Kratie



Source: adapted from map provided by Ministry of Industry, Mines and Energy (2010)

Figure 1b: Map of Economic Land Concessions, Social Land Concessions and Mining Concessions in Kratie



Source: adapted from map provided by Ministry of Industry, Mines and Energy (2010)

Interpreting this map requires situated knowledge about friction between different groups. Notably, the company was in an advanced stage of exploration and drilling at the time of the field visit, and was threatening the local ASM community with eviction, as acknowledged both by artisanal miners who were interviewed and by representatives of the company. Artisanal miners interviewed on the site heavily protested the fact that the Xing Yuan Kang Yeak – in 2009 – started to construct its company buildings just 400 metres from where their houses were located.⁸ In fact, a legal battle was launched by local people in Sambo shortly after the company started construction. When the company's license officially went from being a mineral exploration license to a mining license in 2011, this further complicated relations. According to some reports in 2012, Xing Yuan Kang Yeak had invested 8.5 million US dollars into its gold mining operations, further solidifying its territorial presence (despite public concerns about lack of transparency in revenues) (Phnom Penh Post, 2012). Unlike contexts where ASM groups are composed of highly migratory populations, the community living in the company's concession identified more as a traditional mining community in the sense that the people living in the site had been residing there as families since the 1990s and were long dependent on ASM as a livelihood. The company's use of armed guards to try to forcibly displace the artisanal miners raised tensions both for artisanal miners and provincial mining authorities that inhibited the development of long-term livelihood and environmental planning strategies for the artisanal gold mining in the area. In interviewing one of the armed guards at Xing Yuan Kang Yeak's concession⁹, it was apparent that the company did not want to acknowledge the long-term "claim to space" that the Sambo district villagers had been trying to assert. Company security guards also claimed that the artisanal miners who lived on the site should not be thought of as a "village" but rather as "illegal" – though this was contested by the families who lived on the site, consisting of 496 people (according to a provincial census assessment); the settlement has reportedly been growing since established in the early 1990s (interviews in Kratie, June 2010).

To illustrate the complexity of "making space for artisanal mining," the ASM site visited in Kratie, as shown in Figure 1b, is located completely within a mining concession which itself is not only immediately adjacent to other mineral concessions, but entirely located within the land concession held

⁸ Interviews with two artisanal miners were conducted in June 2010 in the contested location in which they conducted gold extraction and lived; this location was immediately adjacent to a gold-rich ore vein that was claimed by the Chinese company. Reflections on the artisanal miners' protests were also shared in a subsequent interview with the provincial MIME director, at the provincial MIME office in Kratie town.

⁹ Interview with the mining company (Xing Yuan's) security guard on-site, Kratie, June 2010.

by another company – an agribusiness. The agribusiness company (Green Island) was reportedly conducting teak logging in its concession, and interviews indicated that not only are artisanal miners in Sambo treated purely as “illegal”, but the artisanal miners are caught in wider cross-company feuds over space between these larger companies.¹⁰ Coming into contact with security forces of both companies was not uncommon in Sambo. Just as critical scholarship on land grabs and communities’ land use practices in Cambodia stresses the importance of rethinking the “illegality” of local land use practices from a more pro-poor and context-sensitive perspective (Neef et al., 2013; Rudi et al., 2014; Biddulph, 2011), similar cautions are needed here, with historical complexities of resource extraction and resource disputes carefully considered. Some of Kratie’s ASM activity goes back decades as a family tradition, as in Sambo, and in such cases the term “illegal” would be a misleading oversimplification. Nonetheless, the illegal status created many local challenges; as one artisanal miner stressed, the entire settlement of artisanal miners has been pressured by both Xing Yuan Kang Yeak guards and government officials to stop any further mining. In 2010, temporary allowances for the artisanal miners to conduct re-processing of mineral tailings had been informally granted on occasion - as a short-term means of “sharing space”; but further digging and excavation of ore had been strictly prohibited by the company and by government authorities.¹¹

The notion of “legal” use of space is complex as not only are there disputes over boundaries in Kratie, companies were said to use their concessions for purposes other than the official purposes allowed by their licenses (e.g. in some cases, companies that hold permits only for mineral exploration also reportedly engage in mining activities as well as sometimes also logging activities). Reports have widely suggested that some large companies in Cambodia were obtaining mineral “exploration” licenses in order to mask their own secretive mining activities, and artisanal miners have been vocal in the media in protests against this. For example, a Cambodian TV show, *Equity Weekly*, captured some of these sentiments, airing the concerns of both artisanal miners and provincial government civil servants vis-à-vis the failure of certain large mining companies to be accountable and transparent in their land use practices (*Equity Weekly*, 2009). As one NGO interviewee¹² stressed as well, the trend towards

¹⁰ Conveying a sensitive understanding of the complex local conflicts, provincial MIME staff members interviewed in June 2010 noted that companies in this region of Kratie had strained relationships with each other (as well as with the people who lived on the land). Even though mineral exploration concessions and agribusiness concessions can technically overlap, in practice companies were not always happy to share the space and sometimes the companies used guards to prevent access by others to certain parts of the concessions.

¹¹ Interview with on-site company security guard, Sambo District, Kratie, June 2010.

¹² Interview with Cambodian NGO staff member 1, Phnom Penh, June 2010.

neoliberalisation in the mining sector has meant that families living in gold-rich areas are increasingly being told by authorities and companies to leave and re-settle in exceedingly small plots of land. Alluding to a sense of shrinking space for viable livelihoods, this NGO extension worker reflected on the situation in Kratie with a comparison to a controversial case in Mondlukiri where, as he stated, “the artisanal mining community was told to resettle” and “where the resettlement area has tiny plots of land less than half of a hectare per family...Before, they had 5 hectares per family. Now, nobody stays in the relocation area.”¹³

Referring again to the map of Kratie in Figure 1b, it is notable that some small areas are marked as “Social Land Concessions” (SLCs). These areas carry particular symbolic importance for government authorities as relocation spaces to where Cambodians can be moved when larger-scale economic projects are initiated - to make space for what some portray as more “productive” land use enterprises. The SLCs are highly contested by artisanal miners, especially given uncertainty about what prospects for agriculture or other income-generating land use there would be in SLCs. Addressing the ASM site visited in Kratie (block 8), provincial government officials spoke of the possibility of relocating the artisanal miners in a SLC in a region outside of the Chinese company’s concession; yet upon further discussion, the officials acknowledged that in this “relocation” area, mineral deposits were considerably less viable for ASM. Indeed a growing body of literature is warning of the threats of using SLCs in Cambodia as a means of dealing with displaced rural populations in other land use sectors besides mining, particularly as SLCs are located in areas that often have low soil fertility for agriculture (not to mention low mineral potential) (Neef et al., 2013; Scheidel et al., 2013). The relationship between the mining areas in block 8 in Figure 1b and the SLCs depicted on Figure 1b – at a distance from the mining area - is a matter of considerable contention. Just as Neef et al (2013) highlighted how the relation between ELCs and SLCs is often predicated on policymakers’ problematic view that the existence of SLCs effectively justify forced evictions, discussion with Cambodian environmental NGO representatives stressed that SLCs are hardly an equitable solution for resolving disputes in mining areas.¹⁴

The situation in Kratie resonates with the “informal” mining contexts discussed by Lahiri-Dutt (2004; 2014), who argued (in other contexts in Asia) that “informal” is often a more appropriate term than the word “illegal” when referring to ASM, as the lack of legal status may have more to do with

¹³ Interview with Cambodian NGO staff member 2, Phnom Penh, June 2010.

¹⁴ Interview with Cambodian NGO staff member 3, Phnom Penh, June 2010.

social marginalization and lack of access to licenses than with local disinterest in obtaining a license. Although interviews with provincial MIME officials in Kratie suggested that there may still be numerous cases where exploitative, illegal mining activities do need to be firmly policed and phased out, the notion of an “informal” ASM sector is now being increasingly debated in light of the Minamata Convention on Mercury as discussed below. Some interviewees suggested that, to curtail illegal mining and mitigate mercury pollution risks, efforts to create a legal space for ASM miners could facilitate local capacity-building and education programs. Yet, divergent views on the notion of ASM “legalization,” and ongoing threats of conflict between artisanal miners and large companies have continued to create uncertainty in managing the sector in Kratie. Even among government officials interviewed, there were markedly different views on environmental governance with respect to ASM. One interviewee from MIME, a government geologist, noted that: “small-scale miners need to be trained to improve the gold extraction and processing methods and educate them to make them more responsible.”¹⁵ By contrast, another Phnom Penh-based government official was concerned that “If people start to get licenses to do this [small-scale mining], many more people will come to do mining,” adding, “if they get an artisanal mining license, they might end up wanting to do small-scale mining with the bigger [more dangerous] equipment.”¹⁶ To understand how the Minamata Convention is forcing a rethinking of “space for artisanal mining,” thereby presenting a conundrum for land use governance in Cambodia, it is important to appreciate both the context for its development globally as well as the contexts for its implementation, as discussed below.

Implementing the Minamata Convention and reshaping perspectives on the ASM sector

The Minamata Convention as an impetus for formalization

A small but emerging body of scholarship is focusing on the Minamata Convention as a global environmental governance instrument that beckons the re-conceptualization of multi-scalar resource management and risk mitigation challenges (Selin, 2014; Clifford, 2014; Spiegel et al., 2015). The global context for developing the Minamata Convention was shaped by considerable pressure from NGOs and environmental health scientists; extensive lobbying and evidence of health and environmental risks related to mercury motivated Cambodia’s government and other governments worldwide to negotiate a Convention to curtail mercury use and pollution. Cambodian officials from

¹⁵ Interview with MIME officer 1, Phnom Penh, June 2010.

¹⁶ Interview with MIME officer 2, Phnom Penh, June 2010.

MIME and the Ministry of Environment participated in the inter-governmental negotiations, which concluded in January 2013 with an agreed text. In February 2013, 140 countries pledged their agreement, and in October 2013, the Convention was signed by 92 countries in Minamata, Japan, a symbolic location with a powerful history of an unforgettable mercury pollution catastrophe. By September 2014, 120 countries had signed on.¹⁷ The Convention requires the control of mercury trade, use in products and industrial processes and emissions to air and water. Whereas other mercury-emitting sectors (e.g. coal-fired power plants, non-ferrous smelting) are addressed together under common provisions, negotiators recognized the unique nature of the ASM sector and the Convention text devotes a specific Article to ASM – Article 7.¹⁸

Previous research cautioned that complete bans on mercury use and trade could drive gold mining and mercury use underground, hindering environmental management (Clifford 2014). The agreed text of the Minamata Convention stipulates, notably, that countries where ASM takes place “*shall take steps to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the releases to the environment of mercury from, such mining and processing*” (Article 7, Paragraph 2). The agreed text of the Minamata Convention also stipulates that each country where ASM activity is “*more than insignificant*” should “*take steps to facilitate the formalization or regulation*” of the ASM sector and “*submit its National Action Plan to the Secretariat no later than three years after entry into force of the Convention*” (Article 7, Paragraph 3b). However, the Convention text merely assumes that “space” is available for “formalizing” ASM, without engaging spatial issues at all, thereby leaving it to the countries themselves to create specific strategic priorities.

Throughout the official 4-year negotiation process that culminated in the signing of the Minamata Convention on 2013, a common theme discussed was the benefits that can and do accrue when governments, unlicensed miners and civil society organisations come together to improve local capacities for mitigating environmental risks. This perspective follows a trend in scholarship that emphasizes advantages associated with providing education services to ASM groups even if they are unlicensed at the time of the interventions (Andrew, 2003; Hilson, 2002; Veiga et al., 2014; UNEP, 2012a; UNEP, 2012b; Spiegel, 2009; Spiegel, 2012; Spiegel, 2014b; Spiegel et al., 2012). Scholars have

¹⁷ <http://www.mercuryconvention.org/News/2014Treatyevent/tabid/4126/Default.aspx> (accessed September 28, 2015).

¹⁸ The importance of the ASM sector was stressed prior to the final negotiation session, when UNEP published a study reporting that mercury releases in ASM surpassed emissions from fossil fuel burning, making ASM the largest anthropogenic source of mercury pollution globally (UNEP, 2013b).

shown that educating artisanal mining groups to minimize mercury use and mitigate associated risks is a crucial strategy from an environmental risk management point of view, *especially* in cases where the miners are not aware of national regulatory requirements and environmental management standards (Veiga et al., 2014; Davies, 2014).

As the effect of treaty implementation efforts on ASM sector formalization will depend on the institutional approach to developing the National Action Plans as well as the human and financial resources dedicated to implementing them, it is useful to briefly examine these dimensions. By 2011, Cambodia's Ministry of Environment had already requested US\$ 1.8 million from international donors to assist in developing and implementing a strategy for managing the ASM sector; in fact, Cambodia was one of the first countries to request funds for implementing the treaty (Ministry of Environment, 2011). However, in addition to uncertainties about donor support (the Global Environment Facility is supposed to provide funds to developing countries to support the implementation of the Minamata Convention, but the amount is not yet settled¹⁹), the degree to which strategies would be developed to "make space" for ASM legalization remains unclear. Interviews in 2014 and 2015 with international environmental activists highlighted two different views of Cambodia's efforts with respect to the Minamata Convention. One perspective (from an international NGO advocate) was that Cambodia's government is an exemplary case of "good practice" by virtue of the fact that it has already assembled a white paper with a strategic plan.²⁰ Others were more skeptical and also expressed concern that in the absence of formalized ASM rights, there is ambiguity as to whether in fact "capacity-building" and "cleaner technology adoption" can happen. Notably, Article 7 of the Minamata Convention includes an Annex (Annex C) that outlines requirements to promote risk awareness in mining communities as well as educational measures to prevent the combined use of mercury and cyanide leaching.²¹ This practice has been noted to pose a particularly toxic threat but one that can be mitigated by providing education on alternative technology (Veiga et al., 2014; Spiegel and Veiga, 2010). Yet many interviewees expressed the view that unless an effort at making space for legal ASM activity takes hold, education efforts associated with the Minamata Convention cannot fully be implemented; a major

¹⁹ One of the most contentious points in the treaty negotiations that led to the Minamata Convention in 2013 was the funding mechanism for implementation. Although the Global Environment Facility was chosen as the funding mechanism, some treaty delegates (particularly delegates representing low income countries) argued that a separate standalone mechanism (specific to the Minamata Convention) would be preferable in order to ensure that there are measures in place for funding capacity-building in the ASM sector in developing countries.

²⁰ Participant observation at international NGO Minamata Convention discussion forums, September 2014.

²¹ While the present study draws on fieldwork in Kratie, fieldwork was also conducted in Ratanakiri, where artisanal and small-scale miners were more widely using cyanidation and mercury amalgamation methods.

recommendation by NGO interviewees was thus that unlicensed groups of ASM workers should be involved actively in the development of environmental governance strategies - even before legal/regulatory complexities are resolved regarding who in fact has the legal rights to mine in contested spaces. Given the complex socioeconomic make-up of Cambodia's ASM sector, as briefly outlined earlier, Cambodian NGO interviewees stressed that it is particularly important to heed the concerns of migrant as well as indigenous mining groups.

Competing discourses, competing visions of productive space

The differing conceptualizations of currently-unlicensed artisanal mining in relation to the Minamata Convention stem in part from two inter-related debates: one relates to whether or not ASM is necessarily environmentally degrading; another key – more fundamental – debate relates to how the very notion of productive space in the extractive sector is visualized. With respect to the competing discourses on environmental stewardship, notably, some gold extraction practices in ASM in Kratie have involved the minimal use of mercury through rudimentary methods of amalgamation that pre-concentrate the gold containing portion of the ore before adding mercury – in some cases using basic materials such as carpets for the concentration process (Figure 2). Artisanal gold miners in Sambo District such as the miner shown in Figure 2²² have argued that their mining practices have far less environmental impact than government officials - and large mining company representatives - claim.

These arguments tap into a wider debate on the competing visions of extractive sector regulatory challenges. Responding to a radically neoliberalized sense of space in the extractive sector, NGOs have been protesting the encroachment of large-scale mining companies in contested territory. Cambodian NGOs such as DPA have also made significant efforts at promoting sustainable land use and rural environmental education projects in gold mining areas. DPA representatives have expressed concerns about whether there can be environmental management training with artisanal miners in concessions that are formally held by large-scale mining companies' as well as whether NGOs would be able to effectively tackle politically complex dilemmas in deciding if, when, where and how to address artisanal gold mining as a "legitimate" activity. A depiction of a "legitimate" poverty-alleviating productive space for artisanal mining is conveyed in Figure 3a, a drawing that appeared in a training manual published in 2012 jointly by two of the NGOs interviewed. The drawing conveys a traditional, low-tech

²² Interview, artisanal miner, Kratie, June 2010.

vision of artisanal mining on a family scale, in an effort to raise awareness of local mining communities' rights and productive capacity. Notably, it provides a stark contrast to the much less labour-intensive large-scale model of mining shown in Figure 3b, from the same NGO manual, as an effort to convey the different risks of dissimilar scales and types of mineral extraction. Contrasting perspectives on “space” in these drawings are noteworthy in focusing critical attention on a large space with few people involved (the company) versus a small space with more people productively employed (the artisanal mining family).

Figure 2: Artisanal Miner Showing Carpet Used for Capturing Gold Particles in Sambo, Kratie



Source: author

Figure 3a: NGO Representation of Artisanal Mining in Cambodia



(Reprinted with permission of Bridges Across Borders & Development and Partnership in Action, 2012)

Figure 3b: NGO Representation of Large-Scale Mining in Cambodia



(Reprinted with permission of Bridges Across Borders & Development and Partnership in Action, 2012)

While the sort of traditional/family artisanal mining evoked in Figure 3a is not the only kind of artisanal mining in the country (notably, the influx of Vietnamese small-scale miners into Cambodia makes it particularly important to appreciate that there are often “local” mining communities and “extra-local” actors involved), the sense of “community mining” that the drawing evokes is striking – as a collective community-managed mining process that would, theoretically, be protected under the Mining Law. However, concern remains that local and indigenous land use rights receive very little formal legal protection in practice, despite formal national policies to protect such rights (Baird, 2013; Keating, 2013). There is also considerable variation in the processes by which such small-scale production spaces are now being replaced with large-scale businesses as well as how these different kinds of large and small-scale mining operate in practice. The contrast between the two drawings hints at the effects of neoliberalising Cambodia’s mining sector – particularly how forms of ASM are being under-valued and subjugated by elite economic actors’ interests, reflecting what Harvey (2006, p. 153) refers to when explaining how neoliberalism facilitates “the suppression of alternative (indigenous) forms of production.”

The suppression of indigenous production modes is also discussed by Holden et al (2011) in reference to the influences of capital-intensive large-scale mining in the Philippines. Holden et al. (2011) outline environmental problem associated with large-scale mining, in the form of tailings and the danger of major spills, noting that large-scale mining poses severe dangers to both biophysical and social environments, highlighting “the inconsistency between the law promoting mining, the Mining Act, and the law codifying the rights of indigenous peoples” (Holden et al., 2011, p.152). In Cambodia, the inconsistency between the Minamata Convention requirements and existing national mining strategy illustrates a “new” source of debate in extractive sector governance: the “environmental” rationale behind the “formalization” clause (i.e. Article 7 in the Minamata Convention) could, in theory, provide a global argument in favour of recognizing local ASM communities’ resource rights. Although Cambodian authorities have been prioritizing investment in large-scale concessions as part of an economic growth agenda (see Rudi et al., 2014; Keating, 2013), the government’s signing of the Minamata Convention presents – if even only theoretically – a catalyst to address the environmental governance conundrum about formalizing ASM in regions where resource rights are disputed.

Re-visioning the conundrum

In numerous countries, governments have recognized the need to designate specific land areas with gold deposits for ASM (Hinton et al., 2003; Hinton, 2006; UNEP, 2012a). In some countries, governments have set aside particular gold deposits for ASM and sometimes governments have taken measures to encourage exploration/mining companies to share concessions and to work cooperatively with unlicensed ASM workers in the areas, particularly those who worked there before the companies came to the region. This has not been done in Cambodia, although new steps to legalize ASM in one region in Monduliri – which finally received a community mining license in 2015 – indicate that there is some space for change in a sector that has long been treated as “criminal.” The *Phnom Penh Post* has reported that Monduliri’s now-legalized ASM site has produced a new wave of optimism – describing artisanal miners who feel that “We are not afraid of anyone now... without the license we had to stop a few times every month due to crackdowns. It was difficult...” and “I think all other communities should have a license like we do” (Phnom Penh Post, 2015d). According to several Cambodian NGO respondents, designating more physical space for community-mining would help avoid conflict, make access to resource extraction opportunities more equitable and ensure that illegal livelihoods indeed have *space* to transform into “legal” livelihoods. However, as noted in a 2015 interview with an international consultant assisting in the implementation of National Action Plans for the Minamata Convention, although “there is interest in new approaches on ASGM [artisanal and small-scale gold mining]...” there are “no specifics on NAP [National Action Plan] yet.”²³ Moreover, while alluding to baseline ASM impact assessments that were recently funded by the Global Environment Facility, he stressed that it remains uncertain how baseline assessment information would be used. One key point of concern is the complexity of facilitating inter-agency and inter-institutional cooperation to move beyond issues of ASM “assessment” to issues of land use planning.

Indeed, a point made by all government interviewees as well as other interviewees is that there continues to be *uncertainty* about the priorities for implementing the Minamata Convention. Whilst the Minamata Convention include several strategic planning items such as health and environmental pollution assessments and regulation review, a “spatial” lens highlights the importance of sensitively challenging common de-territorialized depictions of land use formalization that oversimplify the dialectical and contextually idiosyncratic interplays between political and physical space. Just as

²³ Interview, senior international NGO environmental expert (via skype), April 2015.

Gillespie (2015), Loehr (2012a) and Dwyer (2015) caution against adopting uncritical “formalization” efforts, noting that land use formalization paradigms have a tendency in practice to support powerful interests at the expense of other groups, understanding the “formalization” of Cambodia’s extractive sector spaces requires similar vigilance. Concerns about whether there is “space” for marginalized communities in the ASM sector are far from unique to Kratie and are embedded in complex political debates about formalization of land use. Mining concessions elsewhere in Cambodia have been portrayed as places of clandestine, opaque economic systems of resource extraction and control.²⁴ As Dwyer (2015) writes in relation to the wider context for land use mapping and formalization initiatives in Cambodia, “formalization cannot be seen as merely putting an official stamp on rights which already unambiguously exist. Rather, it is part and parcel of highly contested processes which continue to sort out and give official sanction to competing rights and claims” (Dwyer, 2015, p. 4). Implementing the Minamata Convention requires close attention to socioeconomic relations under “shadow governance” (Le Billon, 2002; Le Billon, 2012) that emerge in resource extraction zones, as artisanal miners are often caught in political and economic patronage networks and these shape how “space” is visualized by different actors.²⁵ This is not to say that problems of exploitation²⁶ and unregulated land use could not be averted – in theory - by legalizing some artisanal mining operations; developing such plans is increasingly important indeed, but they require detailed attention to socio-spatial context.

While the negotiations surrounding the Minamata Convention - and the Convention text itself - did not explicitly address the issue of large companies and their relation to artisanal miners, concerns about intimidation and conflict were discussed in Kratie as major concerns, as large mining companies and agribusiness companies have attempted to displace ASM groups using intimidation. Problems of conflict could be alleviated – in theory - if new steps are taken to formalize ASM rights as part of the Minamata Convention implementation strategy. As Chandet et al. (2010) aptly point out also in the context of Sambo District in Kratie, land conflicts can also be a powerful trigger for new forms of collective action at the grassroots level. Crucially, understanding the Minamata Convention mandate

²⁴ For example, noting that in Ratanakiri, between 2005 and 2010, 22 licenses for mining were issued, for a combined total of approximately 400,000 ha, covering almost 40% of the land mass of the province, an Asian Development Bank report noted, “little is known about how mining licenses are granted to those companies and the same is true about how their mining activities are carried out” (Asian Development Bank, 2010, p. 9),

²⁵ Barney (2009) also provides a valuable reference point for unpacking the spatial and political complexities of “frontier-neoliberalism,” offering a nuanced approach to interrogating “resource frontiers” as “relational spaces.”

²⁶ NGO interviewees, government interviewees and artisanal miner interviewees all indicated that poorer artisanal miners sometimes are forced to pay “informal” taxes - to security guards of companies and governmental officials - and are hence trapped in the “illegal sector” as a consequence.

requires a careful analysis of the context-specific struggles of artisanal miners in the currently “un-formalized” state of affairs, giving greater attention to the agency of miners themselves. As newspaper reports in Cambodia have frequently noted that Cambodian artisanal miners face an “uphill battle” (Marks and Naren, 2012; Phnom Penh Post, 2015d) when it comes to the matter of “legalization,” there is a need to understand what political resistance to change there may be and the influential roles of large companies and powerful elites who shape dominant visions of the “productive” use of mineral-rich land.

Conclusion: making space for ASM in Cambodia?

To contribute to ongoing debates about land use policy and gold mining, this article has examined frictions between two dueling mandates within Cambodia’s extractive sector – one focusing on the development of larger-scale concessions and the other focusing on the “formalization or regulation” of the ASM sub-sector in keeping with the provisions of the Minamata Convention on Mercury. The first of these mandates evidently has so far been much more prominent and influential in guiding political priorities than the second. The Minamata Convention may, in theory, represent an opportunity to rebalance priorities in extractive sector environmental governance, and promote a vision that makes space for ASM. However, in the status quo, as the ASM sector remains almost entirely unlicensed, conflict between ASM groups and more powerful companies risks undermining the development of sustainable solutions. Questions are now arising as to whether Article 7 of the Minamata Convention can be implemented at all in the absence of formally recognizing the rights of ASM communities. The Kratie case study provides a powerful example of the new conundrum in this regard, given constraints in both physical and political space for ASM, and careful attention is needed to how “productive space” for livelihoods is conceptualized in gold mining regions. Thinking through the situated meanings of space, to use the words of Harvey (2004), “opens up ways to identify conflicting claims and alternative political possibilities. It invites us to consider the ways we physically shape our environment and the ways in which we both represent and get to live it” (p. 15).

It is too soon to judge the significance of the Cambodian government’s 2015 decision to grant a community mining license in Mondulkiri or what implications this might have for spatial planning in regions such as Kratie; future research is needed in this regard. Recent announcements by MIME regarding new efforts to decentralize permitting authority – from the national to the provincial level (Phnom Penh Post, 2015e) – also signal a new direction in policy for the ASM sector that could have

significant implications for wider land use planning as well. In contemplating and crafting National Action Plans to implement the Minamata Convention, sensitivity must be given to different visions of mining and different meanings of space. To effectively address the environmental risks of gold mining, participatory district level meetings could help to determine contextually-appropriate strategies for licensing small-scale mining and whether/how alternative livelihoods could be promoted in ASM areas. In conceptualizing and addressing these challenges, academics and policymakers alike need to resist the tendency to treat artisanal miners as simply outcasts and stumbling blocks to modern development progress. As Lahiri-Dutt (2014) articulated, there is an ever-more urgent need to resist “the conventional and singular conceptualization of mining as a highly capitalized and corporatized industrial project” (p. 7) and to make space for alternative, more nuanced understandings of mining on smaller scales. Ultimately, Cambodia’s context is one where large-scale land and mining concessions have restricted local populations’ access to land, shaping “formalization” challenges in complex ways that require careful context-sensitive attention, including the situated relations between miners, equipment owners, land rights holders and others who live and work in contested gold mining regions.

While the case described raises important questions about spatial complexities involved in “formalizing” artisanal mining and offers perspectives to contextualize interpretations of a provincial map of resource rights, it also raises wider important questions about the extent to which global environmental agreements can be a positive impetus for making space for livelihoods in the small-scale mining sector. Critical analyses of other major international environmental agreements such as the Reducing Emissions from Deforestation and Forest Degradation (REDD+) initiative suggest that recent global policy developments risk exacerbating socio-economic inequities (Mahanty and McDermott, 2013) and further marginalizing and criminalizing the artisanal mining sector in particular (Hirons, 2011; Hirons, 2013). The Minamata Convention on Mercury is now bringing forward similar kinds of uncertainties, with a danger that negatively focusing on mercury use in ASM becomes a further excuse for harshly policing the ASM sector rather than regulating it. “Making space” for ASM requires more than just setting aside land – it requires remaking political space with attention to capacity-building, consensus-building and power dynamics linking government institutions, researchers, technical specialists and communities, who all may have a key role to play in identifying policy trajectories. In Cambodia and beyond, to avoid boxing in the ASM sector in a perpetual space of “illegality,” critical attention is needed on the diverse conceptualizations of productive space in these debates.

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